MAXWELL JONES

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EDUCATION

Bachelor of Science, Artificial Intelligence and Math

2019-Present

Carnegie Mellon University '23, Pittsburgh, PA

GPA: 4.0/4.0

- Fundamentals of Programming and Computer Science, Principles of Imperative Computation
- Calculus I, II, Linear Algebra, Physics I, II
- (15-151) Intro to Discrete Math TA, Great Theoretical Ideas in Computer Science Tutor

High School Graduate

2015-2019

Thomas Jefferson High School for Science and Technology, Alexandria, VA

GPA: ~3.6

Multivariable Calculus, Complex Analysis, Differential Equations

STRENGTHS AND PROJECTS

Coding

- Python, Java, C, SQL, Julia, Javascript, HTML, Sklearn, Keras, NumPy, Latex
- Proficient with neural networks, random forests, pathfinding algorithms (Dijkstra, A*), Traveling Salesmen Problem, Game AIs (heuristic, negamax, alpha-beta pruning)

Projects

- Helped create WalkSafe, a program that outputted safe and efficient walking paths given a start and end point at night in dangerous areas, using a maps API, A*, and crime data at TartanHacks 2019
- Competed in an online AI housing competition implementing **random forests** through Sklearn.
- Coded an algorithm that played a game of **Othello** against a human using a heuristic and negamax/alpha beta pruning for finding new moves.
- Used Python to make a **two-layer neural network** with six hidden nodes without the use of libraries. I used this network to test my understanding of neural networks.
- Created a website to bring together young origamists, in HTML, Javascript, and Python, with both front end and back end capabilities. Hashing used to keep passwords safe, cookies used for easy logging in.

LEADERSHIP AND EXPERIENCE

College

- Treasurer for SPIRIT, CMU's Black Student Orginization
- Origami Club Executive Board Member
- Club Basketball
- CMU SCS Social Media Ambassador
- Member of Kappa Sigma Fraternity

Fiat Chrysler Automobiles Internship

Summer 2020

- Worked with the data science team to optimize the HR Absenteeism prediction model
- Used idea behind Meta Analysis to add cross referenced variables across plants to model

Origami

- Wrote a column on young origamists in *The Paper*, a national origami magazine.
- Created an origami website for young origamists to share work.
- Taught origami in multiple countries across three continents.

Personal Computer Science and AI Tutor

Group Java tutor for high school/middle schoolers and one on one AI/Python Tutor.